ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Animal Abstract Element Code: ABNGA06030

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: Egretta thula (Molina)

COMMON NAME: Snowy Egret, Snowy Heron, Brewster's Egret

SYNONYMS: Ardea thula Molina, Leucophoyx thula, Egretta candidissima brewsteri

Thayer and Bangs

FAMILY: Ardeidae

AUTHOR, PLACE OF PUBLICATION: Molina, Sagg. Stor. Nat. Chili, 1782, p. 235.

TYPE LOCALITY: San Jose Island, Baja California Sur, Mexico.

TYPE SPECIMEN: MCZ 311419 (Adult male; Previous Number 11419). W.W. Brown Jr., 20 Jun 1908, in Thayer and Bangs, 1909, Proc. New England Zool. Club, 4: 40.

TAXONOMIC UNIQUENESS: May constitute a superspecies with *E. garzetta*, *E. Gularis* and *E. dimorpha* (AOU 1998 in NatureServe, 2001). Frequently placed in genus *Leucophoyx* (AOU 1983 in NatureServe, 2001).

DESCRIPTION: A medium sized heron of delicate build, adult length 56-66 cm (22-26 in); wingspan 100cm (39 in); mass about 370 g (13.05 oz), with males slightly larger than females). They have entirely white plumage; long, slender black bill; bright yellow bare skin in lores; and long, comparatively slender, black legs, with bright yellow feet. Immatures and nonbreeding adults have duller greenish-yellow feet, this color extending up rear of tarsus to "knee" joint, and paler grayish base of lower mandible. Adults in breeding plumage develop long, delicate plumes forming wispy spray of feathers extending off breast, recurving off lower back, and forming short, shaggy crest off nape. At the height of breeding the lores and feet become much richer in color, tending toward reddish and orangish, respectively. The sexes are similar in appearance even during breeding season.

AIDS TO IDENTIFICATION: Differs from the Great Egret (*Ardea alba*) in being much smaller and having a black bill rather than a yellow one. Differs from the immature Little Blue Heron (*Egretta caerulea*) in having predominately dark legs (vs. dull yellow), a slimmer mostly black bill (vs. two-toned with gray base and dark tip), and usually paler wing tips. Differs from the Cattle Egret (*Bubulcus ibis*) in being larger, slim rather than stocky, and in having a black bill (vs. yellow or red-orange) and predominately dark legs (vs. yellow or dusky-red). Differs from rare white-phase adult Reddish Egret (*Egretta rufescens*) in having yellow toes and lacking a tow-toned pink and black bill.

ILLUSTRATIONS: Color drawing (National Geographic 1999)

Color photo (Danzenbaker in

www.avesphoto.com/website/NA/gallery/Gall-8.htm)

Color photo (Sudia in

http://museum.nhm.uga.edu/gawildlife/birds/ciconiiformes/ethula.html)

Color photo (U of M in

http://animaldiversity.ummz.umich.edu/accounts/agretta/e._thula\$media.h

tml)

Color drawing (Sibley 2000)

Color drawing of egg (Baicich 1997, Plate 20)

TOTAL RANGE:

BREEDING: According to NatureServe (2001), it breeds in northern California, southern Idaho, Kansas, lower Mississippi Valley, and Gulf and Atlantic coasts north to Maine, south through Mexico and the Antilles to South America (to southern Chile and central Argentina). However, "The Birds of North America" (2000) shows them to breed and winter in southwestern Arizona as well. Also, they show the Snowy Egret breeding in South Dakota, Wisconsin, Pennsylvania, New Mexico, Colorado, Wyoming, Montana, and western edge of Lake Erie.

NON-BREEDING: According to NatureServe (2001), it is found during non-breeding season in northern California, southwestern Arizona, Gulf Coast, and South Carolina southward through the breeding range. In the U.S., areas with the highest densities in winter include the Gulf Coast along the Texas-Louisiana border, the mouth of the Mississippi River, the lower Colorado River, and Florida (Root 1988). Wanders irregularly outside usual range; rare straggler to Hawaii. "The Birds of North America" (2000) also list the interior of Central America as part of the wintering range.

RANGE WITHIN ARIZONA: According to "The Birds of North America" (2000), they breed and winter along the lower Colorado River, in west-central Maricopa County along the Gila River, and along the Hassayampa River. Also reported along the Salt River in Gila County.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Their voice is hoarse, rasping *raarr* or nasal *hraaa* very similar to the Little Blue Heron; higher and more nasal then the Great Egret. In flight occasionally a hoarse cough *charf*. Nest predators include raccoons, Great Horned Owls, Barred Owl, American Crow, Fish Crow, American alligator and gray rat snake.

-3-

REPRODUCTION: The breeding season begins in mid-January, peaks in April and May, and extends through July. Primary courtship display is Stretch display, during which the male pumps body up and down while holding bill pointed skyward and calling. The male may also perform an Aerial Stretch display, Circle Flight, Tumbling Flight and Jumping-over (BNA 2000). This species nests in a variety of sites near fresh or salt water. They will nest solitary, in small group or in large colonies of up to 1,000 nests. Nests are usually built in trees or shrubs over the water from 3-6m (10-20 ft) above the ground. The nest is constructed from twigs and sticks and made into a platform style nest. Grass, tulles, rushes, and Spanish moss is used to line the nest. The female does most of the nest building, which continues at least through incubation. The male supplies the nesting material while the female works sticks into nest. Nest material reflected colony-site habitat. Nest building often follows copulation. Nest relief ceremony often accompanied by offering nest material. They are known to use old nests.

The female lays 1-6 (usually 3) eggs that are incubated for 23-26 days. The eggs are laid on alternate days. The incubating is done by both sexes, beginning with the first egg. The eggs are elliptical and greenish-blue; and are smooth and non-glossy. The nestlings are semi-altricial and downy. The down is white, long and fine on the head. The bill and the feet are pale yellow and the skin is light green. Both parents tend the young. Food dropped on to nest for first few days, later the young grasp the adult bill. Young leave the nest for branches at 3-4 weeks. By 3-4 weeks after hatching the young leave the nest, but are still cared for by the adults.

FOOD HABITS: It forages mostly in shallow water, eating primarily crustaceans, fish, frogs, lizards, snakes, worms, insects and small vertebrates. It forages by waiting for prey to pass by and will also stir up prey with its feet and chase after it. Nestling food includes mosquito fish, sailfin mollies, killifishes, and grass shrimp. They leave their roosts at dawn to forage, and return again in the evening.

HABITAT: Marshes, lakes, ponds, lagoons, mangroves and shallow coastal habitats.

ELEVATION: In Arizona it has been found between 100-1,950 ft (30.5-594 m) in AGFD HDMS unpublished database records 2002.

PLANT COMMUNITY:

POPULATION TRENDS: Populations in the south-central U.S. may be benefiting from crayfish aquaculture, which provide foraging opportunities (NatureServe, 2001).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: WSC (AGFD, WSCA in prep)

[Threatened, TNW AGFD 1988] None

OTHER STATUS:

MANAGEMENT FACTORS: Threats to the Snowy Egret include the clearing of flood plain forests, and the loss and degradation of wetlands. They are also sensitive to human disturbance at their nesting sites.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Better information is needed on key roosting and nesting habitats statewide. Habitat requirements should be documented, as should the effects (if any) of specific recreational uses of occupied areas. Baseline information on population status will become crucial as wetlands continue to be affected by a variety of land uses (Johnson 1996).

LAND MANAGEMENT/OWNERSHIP: BLM - Phoenix Field Office; TNC - Hassayampa River Preserve; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Arizona Game and Fish Department (AGFD). 1988. Threatened Native Wildlife in Arizona. AGFD, Phoenix, AZ. P. 16.
- Arizona Game and Fish Department. In prep. Wildlife of special concern in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. 32pp.
- Baicich, P.J. et al. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Second Edition. Natural World Academic Press. San Diego, California. P. 62, pl. 20.
- Danzenbaker, M. 1987. Available: www.avesphoto.com/website/NA/gallery/Gall-8.htm Georgia Museum of Natural History. 2000. Snowy egret.
 - http://museum.nhm.uga.edu/gawildlife/birds/ciconiiformes/ethula.html
- Johnson, T.B. 1996. Wildlife Views. Arizona Game and Fish Department, November 1996, pp16.
- National Geographic. 1999. Field Guide to the Birds of North America. National Geographic Society, Third Edition, Washington D.C. Pp. 60-61.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: http://www.natureserve.org/explorer. (Accessed: November 25, 2002).
- Parsons, K.C., and T.L. Master. 2000. Snowy Egret (*Egretta thula*). *In* The Birds of North America, No. 489 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
- Sibley, D.A. 2000. The Sibley Guide to Birds. Alfred A. Knopf, New York, New York, P. 61.

Smithsonian Marine Station at Fort Pierce. 2001. Egretta thula. Available:

http://www.sms.si.edu/IRLSpec/Egretta_thula.htm

Sudia, D. 2000. Available:

http://museum.nhm.uga.edu/gawildlife/birds/ciconiiformes/ethula.html

University of Michigan, Avialable:

http://animaldiversity.ummz.umich.edu/accounts/agretta/e._thula\$media.html

-5-

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

The genus name comes from the French word aigrette (egret). The species name, *thula*, is a Chilean name for this species.

At the turn of the last century the Snowy egret numbers plummeted due to the thriving millinery feather trade. Plumes were valued at \$32 and ounce. Market and feather hunting devastated heron and egret populations, leading to the creation of the National Audubon Society and federal laws to protect migratory birds.

Revised: 2002-11-25 (AMS)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= year of last revision as idicated at end of abstract). X...X (=taxon of animal or plant). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.